

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10511314
Filing Date	2005-05-17
First Named Inventor	David WALLACH
Art Unit	1652
Examiner Name	S. Swope
Attorney Docket Number	WALLACH33

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	2	Smith., "Filamentous Fusion Phage: Novel Expression Vectors That Display Cloned Antigens on the Virion Surface" <i>Science</i> , 228:1315-17 (1984)	<input type="checkbox"/>
	3	Fields et al., "A novel genetic system to detect protein-protein interactions" <i>Nature</i> , 340: 265-6 (1989)	<input type="checkbox"/>
	4	Akiba et al., "CD27, a Member of the Tumor Necrosis Factor Receptor Superfamily, Activates NF- $\kappa$ B and Stress-activated Protein Kinase/c-Jun N-terminal Kinase via TRAF2, TRAF5, and NF- $\kappa$ B-inducing Kinase" <i>J. Biol Chem</i> , 273 (21): 13353-13358 (1998)	<input type="checkbox"/>
	5	Baldwin, Jr., "The NF- $\kappa$ B and I $\kappa$ B Proteins: New Discoveries and Insights" <i>Annu. Rev. Immunol.</i> , 14: 649-83 (1996)	<input type="checkbox"/>
	6	Ghosh et al., "NF- $\kappa$ B AND REL PROTEINS: Evolutionarily Conserved Mediators of Immune Responses" <i>Annu. Rev. Immunol.</i> , 16:225-60 (1998)	<input type="checkbox"/>
	7	Karin et al., "PHOSPHORYLATION MEETS UBIQUITINATION: The Control of NF- $\kappa$ B Activity" <i>Ann. Rev. Immunol.</i> , 18:621-663 (2000)	<input type="checkbox"/>
	8	Canicio et al., "Nuclear Factor $\kappa$ B-inducing Kinase and I $\kappa$ B Kinase-a Signal Skeletal Muscle Cell Differentiation" <i>J Biol Chem</i> , 276(23): 20228-33 (2001)	<input type="checkbox"/>
	9	Darnay et al., " Activation of NF- $\kappa$ B by RANK Requires Tumor Necrosis Factor Receptor-associated Factor (TRAF) 6 and NF- $\kappa$ B-inducing Kinase" <i>J Biol Chem</i> , 274, 12:7724-31 (1999)	<input type="checkbox"/>
	10	DiSanto et al., "Lymphoid development in mice with a targeted deletion of the interleukin 2 receptor gamma chain", <i>Proc. Natl. Acad. Sci.</i> , 92:377-381 (1995)	<input type="checkbox"/>

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	11	Fagarasan et al., "Alymphoplasia (aly)-type Nuclear Factor kB-inducing (NIK) Kinase Causes Defects in Secondary Lymphoid Tissue Chemokine Receptor Signaling and Homing of Peritoneal Cells to the Gut-associated Lymphatic Tissue System", <i>J. Exp. Med.</i> , Vol 191, 1477-86 (2000)	<input type="checkbox"/>
	12	Foehr et al., "The NF-kB-inducing Kinase Induces PC12 Cell Differentiation and Prevents Apoptosis", <i>J Biol Chem</i> , Vol. 275 (44): 34021-24 (2000)	<input type="checkbox"/>
	13	Matsushima et al., "Essential Role of Nuclear Factor (NF)-k B-inducing Kinase and Inhibitor of kB (IkB) Kinase a in NFK B Activation through Lymphotoxin b Receptor, but Not through Tumor Necrosis Factor Receptor I", <i>J. Exp. Med.</i> Volume 193, 5:631-636 (2001)	<input type="checkbox"/>
	14	Mercurio et al., "Multiple signals converging on NF-ICB", <i>Current Opinion in Cell Biology</i> , 11:226-232 (1999)	<input type="checkbox"/>
	15	Natoli et al., "Tumor Necrosis Factor (TNF) Receptor 1 Signaling Downstream of TNF Receptor-associated Factor 2: NUCLEAR FACTOR kB (NFkB)-INDUCING KINASE REQUIREMENT FOR ACTIVATION OF ACTIVATING PROTEIN 1 AND NFkB BUT NOT OF c-Jun N-TERMINAL KINASE/STRESS-ACTIVATED PROTEIN KINASE" <i>J Biol Chem</i> , Vol. 272(42):26079-26082 (1997)	<input type="checkbox"/>
	16	Pahl et al., "Activators and target genes of Rel/NF-kB transcription factors" <i>Oncogene</i> , Vol 18: 6853-6866 (1999)	<input type="checkbox"/>
	17	Regnier et al., "Identification and Characterization of an IkB Kinase" <i>Cell</i> , Vol. 90:373-383 (1997)	<input type="checkbox"/>
	18	Noguchi et al., "Interleukin-2 Receptor y Chain Mutation Results in X-Linked Severe Combined Immunodeficiency in Humans" <i>Cell</i> , Vol. 73: 147-157 (1993)	<input type="checkbox"/>
	19	Senftleben et al., "Activation by IKKa of a Second, Evolutionary Conserved, NF-kB Signaling Pathway" <i>Science</i> , Vol. 293:1495-9 (2001)	<input type="checkbox"/>
	20	Shinkura et al., "Alymphoplasia is caused by a point mutation in the mouse gene encoding Nf-kb-inducing kinase" <i>Nat Genet</i> , Vol. 22:74-7 (1999)	<input type="checkbox"/>
	21	Sylla et al., "Epstein-Barr virus-transforming protein latent infection membrane protein 1 activates transcription factor NF-kB through a pathway that includes the NF-kB-inducing kinase and the IkB kinases IKKa and IKKb" <i>Proc. Natl. Acad. Sci.</i> , Vol. 95:10106-10111 (1998)	<input type="checkbox"/>

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	22	Takeuchi et al., "Anatomy of TRAF2: DISTINCT DOMAINS FOR NUCLEAR FACTOR-KB ACTIVATION AND ASSOCIATION WITH TUMOR NECROSIS FACTOR SIGNALING PROTEINS" J Biol Chem, Vol. 271(33): 19935-42 (1996)	<input type="checkbox"/>
	23	Uhlik et al., "NF-kB-inducing Kinase and I $\kappa$ B Kinase Participate in Human T-cell Leukemia Virus I Tax-mediated NF-kB Activation" J Biol Chem, Vol. 273(33): 21132-21136 (1998)	<input type="checkbox"/>
	24	Xiao et al., "Negative Regulation of the Nuclear Factor kB-inducing Kinase by a cis-Acting Domain" J Biol Chem, Vol. 275(28): 21081-21085 (2000)	<input type="checkbox"/>
	25	Xiao et al., "NF-kB-Inducing Kinase Regulates the Processing of NF-kB2 p100" Molecular Cell, Vol. 7:401-409 (2001)	<input type="checkbox"/>
	26	Yamada et al., "Abnormal Immune Function of Hemopoietic Cells from Alymphoplasia (aly) Mice, a Natural Strain with Mutant NF-kB-Inducing Kinase" J. Immunol, 165: 804-812 (2000)	<input type="checkbox"/>
	27	Yamamoto et al., "Therapeutic potential of inhibition of the NF-kB pathway in the treatment of inflammation and cancer" The Journal of Clinical Investigation, Vol. 107(2): 135-142 (2001)	<input type="checkbox"/>
	28	Yin et al., "Defective Lymphotoxin- $\beta$ Receptor-Induced NF-kB Transcriptional Activity in NIK-Deficient Mice" Science, Vol 291:2162-2165 (2001)	<input type="checkbox"/>
	29	Leonard et al., "Role of the Common Cytokine Receptor (gamma)Chain in Cytokine Signaling and Lymphoid Development" Immunal Rev, No. 148: 97-114 1995 SLS 4/15/09	<input type="checkbox"/>
	30	Adang et al., "The Contribution of Combinatorial Chemistry to Lead Generation: An Interim Analysis" Curr Med Chem, 8:985-998 (2001)	<input type="checkbox"/>
	31	Miyawaki et al., "A new mutation, aly, that induces a generalized lack of lymph nodes accompanied by immunodeficiency in mice" Eur. J. Immunol, Vol. 24: 429-434 (1994)	<input type="checkbox"/>
	32	Garceau et al., "Lineage-restricted function of nuclear factor kappaB-inducing kinase (NIK) in transducing signals via CD40" J. Exp Med, Vol. 191:381-6. (2000)	<input type="checkbox"/>

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	33	Gelezunas et al., "Human T-cell leukemia virus type 1 Tax induction of NF-kappaB involves activation of the IkappaB kinase alpha (IKKalpha) and IKKbeta cellular kinases" Mol Cell Biol, Vol. 18: 5157-65. (1998). <input type="checkbox"/>
	34	Lin et al., "The protooncogene Cot kinase participates in CD3/CD28 induction of NF-kappaB acting through the NF-kappaB-inducing kinase and IkappaB kinases" Immunity, Vol 10:271-80 (1999) <input type="checkbox"/>
	35	Ling et al., "NF-kappaB-inducing kinase activates IKK-alpha 15 by phosphorylation of Ser-176" Proc Natl Acad Sci, Vol 95:3792-7. (1998) <input type="checkbox"/>
	36	Malinin et al., "MAP3K-related kinase involved in NF-kappaB induction by TNF, CD95 and IL-1" Nature, 385:540-4. (1997) <input type="checkbox"/>
	37	Matsumoto et al., "Involvement of distinct cellular 20 compartments in the abnormal lymphoid organogenesis in lymphotoxin-alpha-deficient mice and alymphoplasia (aly) mice defined by the chimeric analysis" J. Immunol, 163, 1584-91 (1999) <input type="checkbox"/>
	38	Rothe et al., "Human NIK protein" DATABASE GENESEQ 'Online! EBI, Hinxton, Cambridgeshire, U.K. Database accession no. AAW82497 (1999-03-04) <input type="checkbox"/>
	39	Boldin et al., "Amino acid sequence of NF-kappaB inducing kinase" DATABASE GENESEQ 'Online!, EBI. Hinxton, Cambridgeshire, U.K.; Database accession no. AAW42402 (1998-04-15) <input type="checkbox"/>

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